



Name: Siti Halimah binti Sarijo

Office: Faculty of Applied Science, University Technology MARA, 40450 Shah Alam Selangor

Fax: 03 55444562

Tel: 03 5521 1733

Email: siti_halimah_404@yahoo.com / sitihalimah@salam.uitm.edu.my

PROFESIONAL MEMBERSHIP

1. Member of Institute of Chemistry (AMIC)
2. Member Persatuan Kimia Analisis Malaysia (Analisis)

EDUCATION BACKGROUND

1. BSc. (Hons) Chemistry (1990) (Universiti Kebangsaan Malaysia)
Field of Study: Chemistry
Duration : 1986-1990
2. MSc. in Instrumental Analytical Chemistry (Glasgow Caledonian University, UK)
Field of Study: Instrumental Analytical Chemistry for Quality Control
Duration: 1996- 1997
3. Doctor of Philosophy, Ph. D (Universiti Putra Malaysia)
Field Of Study: Nanomaterials and Nanotechnology
Duration: 2005-2008

WORKING EXPERIENCE:

1991 - 2008 : Lecturer at Universiti Teknologi MARA, Malaysia
2008-present : Senior lecturer at Universiti Teknologi MARA, Malaysia
Jan 2017-Jan 2018 : Sabbatical leave University St Andrews, UK

TEACHING EXPERIENCE:

1991-2004 : General Chemistry CHM138, CHM159 , CHM 231 Physical Chemistry (Diploma)
2008-2016: Physical Chemistry CHM431 (Degree),
Quality Control in Analytical Chemistry CHM561 (Degree)

RESEARCH GRANTS:

- Development of layered organic-inorganic nanohybrid materials: herbicides intercalated into layered double hydroxide and its controlled release properties. E-Science Fund Malaysia (E Sc Fund, Malaysia)
- Synthesis of Zn-Al-layered double hydroxide and its nanocomposites zn-Al-9-hydroxy-9-fluorenicarboxylate for controlled release properties (FRGS Malaysia)
- Nanoporous Polyion in affinity biosensor aniline Film for high protein immobilization, Excellent Fund University Technology MARA Malaysia.
- Intercalation of 9-hydroxy-9-fluorenicarboxylate into Zn-Al-layered double hydroxide for the development of controlled release agrochemicals Excellent Fund University technology MARA Malaysia.
- The effects of oil palm empty fruit bunch (OPEFB) fibre on the fracture toughness of polymer nanocomposites Excellent Fund University Technology MARA Malaysia.
- Modified synthesis of intercalated flufenamic acid and fenopfen into layered double hydroxides for the formation of a new controlled release anti-inflammatory drug (FRGS, Malaysia)
- Evaluation of catalytic activity on bentonite catalyst for glycerol etherification(FRGS, Malaysia)
- 3,4-dichlorophenoxyacetic acid (3,4d) herbicide for friendly environment material and its controlled release property (Toray foundation)
- Synthesis of intercalated fenopfen into layered double hydroxide for the formation of controlled release anti-inflammatory drug (Toray foundation)

SELECTED PUBLICATIONS:

1. **Sarijo, S.H.**, Ahmad, A, Muhsin, S.M.N, Jubri, Z. Synthesis of layered organic-inorganic nanohybrid zinc-aluminium-2-(4-chlorophenoxy)-2-methyl propionic acid with controlled release properties, *Journal Porous materials*, in Press.
2. Sumayah megat Nabil Mohsin, Mohd Zobir Hussein, **Siti Halimah Sarijo**, Sharida Fakurazi, Palanisamy Arulselvan, Yap Yun Hin, Nanolayered composite with enhanced ultraviolet ray absorption properties from simultaneous intercalation of sunscreen molecules, *International Journal Of Nanomedicine*, 2018, 13, 6359-6374
3. Abdul aziz, I.N.F., **Sarijo, S.H.**, Mohd Rajidi, F.S., Yahaya, R., musa, M. Synthesis and characterization of novel-4 aminobenzoate interleaved with zinc layered hydroxide for otential sunscreen application, *Journal Porous materials*, in Press.
4. Jubri, Z, Ysoff, N.Z.A.M, **Sarijo, S.H.**, Marsom, E.S., Hussein, M.Z. Synthesis, characterization and controlled release properties of zinc-aluminium-beta-naphthoxyacetate nanocomposite, *Journal Porous Materials*, 2017,24(3), 573-582.
5. Salleh, N.M., **Sarijo, S.H.**, Kalam, A.Synthesis and physico-chemical properties of zinc-layered hydroxide-3-4dichlorophenoxy acetic acid (ZLH34D) nanocomposite, *Key Engineering Materials*, 2017, 744, 441-445.
6. **Sarijo, S.H.**, Jadam, M.L., Jubri, Z. Synthesis and physicochemical characterization of Mg-Al-flufenamate-layered double hydroxide, *Materials Science Forum*, 2017, 887, 100-103.

7. Ahmad, R.; Hussein, M.Z.; **Sarijo, S.H.**, Yun-Hin, T.Y. Synthesis and Characteristics of Valeric acid-zinc layered hydroxide intercalation material for insect pheromone controlled release formulation, *Journal of materials*, 2016, 1-9. doi:10.1155/2016/1285721.
8. Ahmad, R.; Hussein, M.Z.; **Sarijo, S.H.**, Yun-Hin, T.Y. Evaluation of controlled release property and phytotoxicity effect of insect pheromone zinc-layered hydroxide nanohybrid intercalated with hexenoic acid, *Journal of Agricultural and Food Chemistry*, **2015**, 63(51), 10893–10902.
9. **Sarijo, S.H.**; Ghazali, S.A.I.S.M.; Hussein, M.Z.; Synthesis of dual-herbicides intercalated hydrotalcite-like nanohybrid compound with simultaneous controlled release property, *Journal of Porous Materials*, **2015**, 22: 473-480.
10. Mohsin, S.M.N.; Hussein, M. Z.; **Sarijo, S.H.**; Arulselvan, P.; Taufiq, Y.H. Characterization of cytotoxicity assessment of UV absorbents-intercalated zinc-Aluminium- layered double hydroxides on dermal fibroblast cells., *Science of Advanced Materials*, **2014**, 6(4), 648-658.
11. Mohsin, S.M.N.; Hussein, M. Z.; **Sarijo, S.H.**; Arulselvan, P.; Taufiq, Y.H.; Optimization of UV absorptivity of layered double hydroxide by intercalating organic UV-absorbent Molecules, *Journal of Biomedical Nanotechnology*, **2014**, 10(8), 1490-1500(11).
12. Ghazali, S.A.I.S.M.; Hussein, M.Z.; **Sarijo, S.H.** Formation of zinc-aluminium layered double hydroxide 2,4,5-trichlorophenoxybutyrate nanocomposites by ion-exchange method, *Advanced Materials Journal*, **2014**, 6 (4), 648-658.
13. Ghazali, S.A.I.S.M.; Hussein, M.Z.; **Sarijo, S.H.** 3,4-dichlorophenoxyacetate interleaved into anionic clay for controlled release formulation of a new environmentally friendly agrochemical, *Nanoscale Research letter*, **2013** , 8(1), 1-8.
14. Ghazali, S.A.I.S.M.; Hussein, M.Z.; **Sarijo, S.H.** Layered double hydroxide as a carrier of herbicide, -2-methyl-4-chlorophenoxy acetic acid. Physicochemical characterization and controlled release herbicide, *Advanced Science Letters*, **2013**, 19(11), 3353-3360.
15. **Sarijo, S.H.**; Ghazali, S.A.I.S.M.; Hussein, M.Z.; Sidik, N. J. Synthesis of nanocomposite 2-methyl-4-chlorophenoxyacetic acid : Physicochemical characterization and controlled release properties, *Journal of Nanoparticle Research*, **2012**, 15:1356-1359.
16. Zobir, S.A.M.; Zainal, Z.; Keng, C.S.; **Sarijo, S.H.**; Yusop, M. Synthesis of carbon nanohorn-carbon nanotube hybrids using palm olein as a precursor, *Carbon*, **2013**, 54, 492-494.
17. Mohsin, S.M., Hussein, M.Z., **S.H.Sarijo**, Fakurazi, S., Arulselvan, P., Hin, T.Y. Synthesis of (cinnamate-zinc layered hydroxide) intercalation compound for application, *Chemistry Central Journal*, **2013**, 7(1), art no. 26
18. Mohsin, S.M.N.; Hussein, M.Z.; Sarijo, S.H.; Arulselvan, P.; Taufiq-Yap, Y.H. Characterisation and cytotoxicity assessment of UV absorbers-intercalated zinc/aluminium-layered double hydroxides on dermal fibroblast cells, **2014**, 6(4), 648-658.
19. Mohsin, S.M., Hussein, M.Z., **Sarijo, S.H.**; Fakurazi, S.; Arulselvan, P.; Hin, T.Y. Synthesis of (cinnamate-zinc layered hydroxide) intercalation compound for sun-screen application, *Chemistry Central Journal*, **2013**, 7(1), art no. 26.
20. Ghazali, S.A.I.S.M.; Hussein, M.Z.; **Sarijo, S.H.** The effect of Zinc to Aluminium Molar ratio on the physico-chemical properties of zinc-aluminium-3,4-dichlorophenoxy acetate nanocomposite, *Materials Science Forum*, **2013**, 756, 127-134.
21. **Sarijo, S.H.**; Hussein, M.Z.; Zainal, Z. Effect of incoming and outgoing exchangeable anions on the release kinetics of phenoxyherbicides nanohybrids, *Journal of Hazardous Materials*, 2010, 518, 263–569.
22. **Sarijo, S.H.**; Hussein, M.Z.; Zainal, Z.; Yarmo, A. Synthesis of phenoxyherbicides-intercalated layered double hydroxide nanohybrids and their controlled release property. *Current Nanoscience*, **2010**, 6(2), 199-205.
23. **Sarijo, S.H.**; Hussein, M.Z.; Zainal, Z.; Hybridization of chlorophenoxyherbicides with layered double hydroxide for the formation of layered organic-inorganic encapsulated agrochemical nanocomposites. *International Journal of Nanoparticles Research*, 2010, 3(3), 229-236.

24. Hussein, M.Z.; , **Sarijo, S.H.**; Zainal, Z. Synthesis of 4-chlorophenoxyacetate-zinc-aluminium layered double hydroxide nanocomposite: physico-chemical and controlled release properties, *Nanoscience and Nanotechnology* , **2007**, 7, 2852-2862.
25. Hussein, M.Z.; Rahman, N.S.S.A.; **Sarijo, S.H.**; Zainal, Z. Synthesis of a monophasic nanohybrid for a controlled release formulation of two active agents simultaneously, *Applied Clay Science*, **2012**, 58, 60-66.
26. Hussein, M.Z.; Nazarudin, N.F.; **Sarijo, S.H.**; Yarmo, M.A, Synthesis of a layered organic-inorganic nanohybrid of 4-chlorophenoxyacetate-zinc layered hydroxide with sustained release properties. *Journal of Nanomaterial*, **2010**, (doi number=10.1155/2012/860352)
27. **Sarijo, S.H.**; Ahmad, A.; Jubri, Z. Synthesis, Characterization and Sustained Release Properties of Zinc-Aluminium-9-Hydroxy-9-Flourenecarboxylate Nanocomposite. *Advanced materials Research*, **2012**, 422, 102-106.
28. Kamarun, D.; Azem, N.; **Sarijo, S.H.**; Abdullah, M. Nanopolyaniline for immobilization of biomolecules: preliminary study. *Material Research forum*, 15 (2)/s1-s4.
29. Zobir, S.A.M.; Abdullah, S.; **Sarijo, S.H.**; Zainal, Z.; Mahmood, M.R. Synthesis of carbon nano and microspheres using palm-olein as the carbon source. *Material letters*, **2012**, 78, 205-208.
30. Zobir, S.A.M.; Abdullah, S.; **Sarijo, S.H.**; Zainal, Z.; Mahmood, M.R. (2012), Raman Spectroscopic Study of Carbon Nanotubes Prepared using Fe/ZnO-Palm Olein-Chemical Vapour Deposition, *Journal of Nanomaterials*, **2012** , article ID:451473)
31. **Sarijo, S.H.**; Hussein, M.Z.; Zulkarnain, Z.; Yahaya, A.H. The effect of pH on the formation of guest-type material-Zn-Al-4-CPA layered double nanocomposite. *Physica Solidis Solidi*, **2007**, 4(2) , 611-613.
32. Kamarun, D; Azem, N.; **Sarijo, S.H.**; Abdullah, M; Mohd, A.F. Nanopolyaniline for immobilisation of biomolecules: preliminary study , *Materials Research Innovations*, volume, **2011**, 15(2), 193-197.
33. Hussein, M. Z.; Rahman, N.S.S.A.; **Sarijo, S.H.**; Zainal, Z. Herbicide-Intercalated Zinc-Layered Hydroxide Nanohybrid for a Dual-Guest Controlled Release Formulation. *International Journal of Molecular Sciences*, 2012, 13, 7328-7342.
34. Hussein, M.Z.; Zakarya, S.A.; **Sarijo S.H.**; Zainal, Z. Parameter Optimization of carbon nanotubes synthesis via hexane decomposition over minerals generated from Anadara granosa shells as the catalyst support. *Journal of Nanomaterials*, **2012**,(Art no: 525616)
35. Hussein M.Z.; Latip, S.; **Sarijo S.H.**; Zainal, Z. Surface transformation of multi-walled carbon nanotubes on treatment with various acids. *Research Journal of Chemistry and Environment*, **2012**, 15(2), 438-444.
36. Savage, A, L.; **Sarijo, S.H.**; Baird, J. A novel screening method for tetracycline in milk combining sensitized-Eu(III) fluorescence and immunoaffinity techniques, *Analytica Chimica Acta*, **1998**, 375, 1-4.
37. Jubri, Z.; Hussein, M.Z.; Yahaya, A.J.; Zulkarnain, Z.; **Sarijo, S.H.** Development of Controlled Drug Release Formulation Based on Pamoate-Zinc-Aluminium-Layered Double Hydroxide, *Malaysian Journal of Analytical Sciences*, **2008**, 12, 491-499.

MANUSCRIPT REVIEWER:

- Hazardous materials (Elsevier)
- Journal of Porous Materials (Springer)
- Current Nanoscience (Bentham scientific publication)
- Environmental engineering and management journal (Iasi University of Romania Publication, Romania)

- International journal of Nanoscience (Inderscience Publication)
- Sains Malaysiana
- Malaysian Analytical journal

Postgraduate Supervision

Current PhD students (m): 1(UiTM), MSc co=2 (UPSI) ,
Graduated PhD:1(m) UiTM, Graduated MSc students (m) =3 (UiTM) (co) = 6 (UPM,
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